PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	Docket No: Q83591
Mie YOSHIMURA, et al.	
Appln. No.: 10/509,596	Group Art Unit: 1794
Confirmation No.: 8356	Examiner: Andrew T. Piziali
Filed: September 29, 2004	

For: IDENTIFYING MARKER, IDENTIFYING METHOD FOR IDENTIFYING MARKER, IDENTIFYING SYSTEM FOR IDENTFYING MARKER, AND METHOD OF PROVIDING IDENTIFICATION SERVICE

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

Table of Contents

I. REAL PARTY IN INTEREST

The real party in interest is TEIJIN FIBERS LIMITED.

II. RELATED APPEALS AND INTERFERENCES

Appellant, Appellant's legal representative, and the Assignee of this application are not aware of any other appeals or interferences which may be related to, directly affect, or be affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 3 - 11, and 13 - 28 are pending in the application.

Claims 11 and 13 - 28 are withdrawn.

Claims 1 and 3 - 10 are rejected.

This is an appeal from the Examiner's rejection of claims 1, 3 - 5, 8, and 9 under 35 U.S.C. § 102(b), as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) for alleged obviousness with respect to Asano (WO 98/46815), where U.S. Patent No. 6,430,348 is cited as a translation document. This is furthermore an appeal from the Examiner's rejection of claim 6 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Asano (WO 98/46815), as applied to claims 1, 3 - 5, 8, and 9 above, and further in view of Hamajima (U.S. Patent Application Publication No. 2002/0016117). This is furthermore an appeal from the Examiner's rejection of claim 7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Asano (WO 98/46815) in view of Hamajima, as applied to claims 6 above, and further in view of Springer (U.S. Patent No. 4,419,479). This is furthermore an appeal from the Examiner's rejection of claim 10 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Asano (WO 98/46815), as applied to claims 1, 3 - 5, 8, and 9 above.

IV. STATUS OF AMENDMENTS

No claim amendments have been requested subsequent to the Amendment filed November 1, 2007, and the final Office Action dated April 10, 2008.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention relates to an identifying maker attached as an identification target to a product or service by a client for identification of said product or service.

Independent claim 1 is directed to an identifying marker being characterized in that at least a portion of said identification target is formed by a planar arranged optical interference fibers being aligned parallel to a lengthwise direction, where each of the optical interference fibers comprises an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion,

wherein the identifying marker is identified by P polarized light and S polarized light from the portion of said planar arranged optical interference fibers, where the P polarized light and S polarized light are observed by using a polarized plate for measurement of a wavelength and intensity curve of polarizing light passing through a slit of the polarizing plate oriented in the lengthwise direction of the optical interference fibers and a direction perpendicular thereto. Support for this claim can be found at, for example, page 3, line 32 through page 4, line 11 and page 14, lines 11 - 27 of the specification.

Claims 3 - 10 are on appeal and directed to preferred embodiments and are directly or indirectly dependent on claim 1.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 3 - 5, 8, and 9 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) unpatentable over Asano (WO 98/46815), where U.S. Patent No. 6,430,348 is cited as a translation document.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (WO 98/46815), as applied to claims 1, 3 - 5, 8, and 9 above, and further in view of Hamajima (U.S. Patent Application Publication No. 2002/0016117).

Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (WO 98/46815) in view of Hamajima, as applied to claims 6 above, and further in view of Springer (U.S. Patent No. 4,419,479).

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (WO 98/46815), as applied to claims 1, 3 - 5, 8, and 9 above.

VII. ARGUMENT

A. REVERSAL OF THE REJECTION OF CLAIMS 1, 3 - 5, AND 8 - 9 OVER ASANO, UNDER 35 U.S.C. § 102(b) OR IN THE ALTERNATIVE 35 U.S.C. § 103(a), IS APPROPRIATE.

Regarding the prior art rejection maintained with respect to claims 1, 3 - 5, and 8 - 9 under 35 U.S.C. § 102(b), or in the alternative 35 U.S.C. § 103(a), in view of Asano, Appellant respectfully submits that the cited art does not anticipate under 35 U.S.C. § 102(b) or render obvious under 35 U.S.C. § 103(a) the presently claimed invention.

With respect to independent claim 1, Asano does not disclose a product wherein

> ". . . at least a portion of the identification target is formed by planar arranged optical interference fibers being aligned in a lengthwise direction in order to observe P polarized light or S polarized light . . ."

as recited in claim 1. In order to observe P polarized light or S polarized light, five conditions must be met: (1) having optical interference fiber comprising an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion; (2) a plurality of optical interference fibers have to be aggregated so as to be arranged parallel to the lengthwise direction of the oriented fiber aligned in a planar fashion, because random alignment of fibers inhibits the claimed optical anisotropic character (see specification from page 13, line 36 to page 14, line 27; see also from page 31, line 16 to page 33, line 1); (3) discovery of P and S polarized light that the aggregated optical interference fibers reflects (see page 14, lines 11-27 of the specification); (4) observation of P and S polarized light through a polarizing plate (see specification from page 32, line 5 to page 33, line 1); and (5) use of the

observed P and S polarized light from an identification marker appended to goods (see specification page 10, lines 22-25).

In contrast, Asano does not disclose an arrangement of optical interference fibers in a parallel alignment in order to observe P polarized light or S polarized light. Instead, Asano focuses on randomizing alignment of optical interference fibers so that they lose P and S polarized light, stating:

> "The essential point of the present invention is that the optically interfering filaments are randomly and collectively stacked in a state where they are axially twisted at intervals along the major axis thereof." Asano at column 33, lines 14 - 18.

See also column 34, lines 25 - 36 of Asano. The random aggregation of optical interference fibers or axially twisting of optical interfering fibers during weaving apparently inhibits observation of the bulk anisotropic optical properties of such fibers, such that P polarized light and S polarized light cannot be observed as required by present claim 1. Therefore, Asano does not disclose an arrangement of optical interference fibers aligned in a lengthwise direction in order to observe P polarized light or S polarized light.

Moreover, Asano does not teach, suggest, motivate, or provide any other reason to arrange "optical interference fibers being aligned in a lengthwise direction in order to observe P polarized light or S polarized light." Asano is silent on such alignment, which indicates that Asano does not appreciate the importance of this aspect of the presently claimed invention. Instead, Asano focuses on randomly and collectively staking optically interfering filaments in order to develop a material that has brightness like that of a metallic gloss with a pure and clear color and artificial gracefulness. See column 1, lines 13-22 of Asano. Therefore, Asano does

not teach, suggest, motivate, or provide other reason to arrange optical interference fibers in a lengthwise direction in order to observe P polarized light or S polarized light.

Significantly, Asano and the other cited references do not appear to disclose *"[a]n identifying marker attached . . . to a product . . .* wherein the identifying marker is identified by P polarized light and S polarized light. . . ." (from claim 1, emphasis added). Although Asano may suggest that optical fibers are suitable for use as part of a good or product, such as a material for skiwear and sneakers, Asano and the cited references do not appear to teach, suggest, motivate, or provide reason for a person of ordinary skill in the art to form an identification marker attached to a product to achieve the presently claimed invention. See column 22, lines 22-29 of Asano.

Therefore, Appellant respectfully submits that Asano and the other cited references do not disclose conditions (3) - (5), nor do they teach, suggest, motivate, or provide other reason to form the presently claimed invention.

Accordingly, reversal of the rejection of claims 1, 3 - 5, and 8 - 9 under 35 U.S.C. § 102, or 35 U.S.C. § 103 is hereby respectfully requested.

B. REVERSAL OF THE REJECTION OF CLAIM 6 OVER ASANO IN VIEW OF HAMAJIMA UNDER 35 U.S.C. § 103(a) IS APPROPRIATE.

Claim 6 depends directly from claim 1, and further requires a 3-component polymer layer inside the polymer layer forming said alternate laminated body. As discussed in section (A), claim 1 is not rendered obvious by Asano, because Asano does not teach optical interference fibers being aligned parallel to a lengthwise direction and does not teach an identifying marker attached to a product. Hamajima is relied upon by the Examiner as teaching the insertion of a 3-

component polymer layer in the intermediate portion of an alternative laminate optical interference fiber as a reinforcing portion. The Examiner has not asserted and relied upon Hamajima as teaching optical interference fibers being aligned parallel to a lengthwise direction or an identifying marks attached to a product, and Hamajima does not appear to disclose such. Therefore, Appellant respectfully submits that since Hamajima does not correct for the deficiencies of Asano, the rejection of claim 6 fails for the same reasons that the rejection of claim 1 fails.

Accordingly, reversal of the rejection of claim 6 under 35 U.S.C. § 103(a) is respectfully requested.

C. REVERSAL OF THE REJECTION OF CLAIM 7 OVER ASANO IN VIEW OF HAMAJIMA, FURTHER IN VIEW OF SPRINGER UNDER 35 U.S.C. § 103(a) IS APPROPRIATE.

Claim 7 depends indirectly from claim 1 via claim 6, and further requires that the 3-component polymer layer comprises fine metal particles. As discussed in section (A), claim 1 is not rendered obvious by Asano, because Asano does not teach optical interference fibers being aligned parallel to a lengthwise direction and does not teach an identifying marker attached to a product. Hamajima is relied upon as indicated above. Springer is relied upon by the Examiner as teaching that it is known in the reinforcing polymer art to include fine metal particles in any of a variety of reinforcing polymeric materials to provide the reinforcing polymer with superior abrasion resistance. The Examiner has not asserted that Springer discloses the above noted features missing from Asano, and it does not appear that Springer discloses such features. Therefore, Appellant respectfully submits that Hamajima and Springer do not correct for the

deficiencies of Asano, and the rejection of claim 7 fails for the same reasons that the rejection of claim 1 fails.

Accordingly, reversal of the rejection of claim 7 under 35 U.S.C. § 103(a) is respectfully requested.

D. REVERSAL OF THE REJECTION OF CLAIM 10 OVER ASANO UNDER 35 U.S.C. § 103(a) IS APPROPRIATE.

Appellant respectfully submits that claim 10 depends directly from claim 1. As discussed in section (A), claim 1 is not rendered obvious by Asano, because Asano does not teach optical interference fibers being aligned parallel to a lengthwise direction and does not teach an identifying marker attached to a product. Therefore, it is respectfully submitted that the rejection of claim 10 fails for the same reason that the rejection of claim 1 fails, in view of the deficiencies of Asano.

Also, in the Final Office Action of April 10, 2008, the Examiner indicated that he was taking "Official Notice ink-painting is a known fiber coloring method" (page 7, paragraph 8). However, the Examiner did not identify any document in support of the Examiner's statement. Appellant submits that the Examiner's belief that "ink-painting is a known fiber coloring method" is known should have been supported by documentary evidence substantiating the Examiner's statement. In the absence of such evidence, Appellant requests that this rejection be reversed for this reason in addition to the deficiencies of the Asano reference.

Accordingly, reversal of the rejection of claim 10 under 35 U.S.C. § 103(a) is respectfully requested.

E. CONCLUSION

In view of the foregoing, it is respectfully submitted that the above-discussed rejections of claims 1 and 3 - 10 are in error.

Accordingly, reversal of the rejections of claims 1 and 3 - 10 is respectfully requested.

The USPTO is directed and authorized to charge the statutory fee (37 C.F.R. §41.37(a) and 1.17(c)) and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Joseph V. Ruch, Jr.
Registration No. 26,577

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860
WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: May 11, 2009

CLAIMS APPENDIX

CLAIMS 1 and 3 - 10 ON APPEAL:

1. An identifying marker attached as an identification target to a product or service provided by a client for identification of said product or service,

the identifying marker being characterized in that at least a portion of said identification target is formed by a planar arranged optical interference fibers being aligned parallel to a lengthwise direction, where each of the optical interference fibers comprises an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion,

wherein the identifying marker is identified by P polarized light and S polarized light from the portion of said planar arranged optical interference fibers , where the P polarized light and S polarized light are observed by using a polarized plate for measurement of a wavelength and intensity curve of polarizing light passing through a slit of the polarizing plate oriented in the lengthwise direction of the optical interference fibers and a direction perpendicular thereto.

3. The identifying marker according to claim 1, wherein the layer thickness is 0.02-0.3 μm for each layer of said alternate laminated body, and the count of layers is 5-120 layers.

4. The identifying marker according to claim 1, which has a protective layer surrounding said alternate laminated body.

5. The identifying marker according to claim 1, wherein when the polymers with different refractive indexes of said alternate laminated body are designated as: polymer A as the polymer with the high refractive index and polymer B as the polymer with the low refractive index, (said polymer A)/(said polymer B) is a combination selected from the group consisting of the following:

(polyethylene terephthalate having a metal sulfonate salt-containing dibasic acid component copolymerized at 0.3-10 mole percent with respect to the total dibasic acid component)/(polymethyl methacrylate with an acid value of 3 or greater), (polyethylene naphthalate having a metal sulfonate salt-containing dibasic acid component copolymerized at 0.3-5 mole percent with respect to the total dibasic acid component forming the polyester)/(aliphatic polyamide), (copolymerized aromatic polyester obtained by copolymerization of a dibasic acid component and/or a glycol component with at least one alkyl group on a side chain, copolymerized at 5-30 mole percent with respect to the total repeating units)/(polymethyl methacrylate), (polycarbonate having 4,4'-hydroxydiphenyl-2,2-propane as a dihydric phenol component)/(polymethyl methacrylate), (polycarbonate having 4,4'-hydroxydiphenyl-2,2-propane as a dihydric phenol component)/(poly(4-methylpentene)), and (polyethylene terephthalate)/(aliphatic polyamide).

6. The identifying marker according to claim 1, which has a 3-component polymer layer inside the polymer layers forming said alternate laminated body.

7. The identifying marker according to claim 6, wherein said 3-component polymer layer comprises metal fine particles.

8. The identifying marker according to claim 1, which comprises, as an identifier, a portion wherein the optical interference fiber is used to construct a body of an identifiable size as a nonwoven fabric, woven fabric, knitted fabric, embroidered fabrics and/or paper.

9. The identifying marker according to claim 1, wherein said fibrous body is a mixture of different types of optical interference fibers having different wavelengths for interference light ranging from the infrared region to the ultraviolet region.

10. The identifying marker according to claim 1, wherein said identification target has a painted or dyed, and/or ink-painted or textile printed, and/or printed identifying section containing said optical interference fiber as shortly cut staple fibers.

EVIDENCE APPENDIX:

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), submitted herewith are copies of any evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

None.

RELATED PROCEEDINGS APPENDIX

Submitted herewith are copies of decisions rendered by a court or the Board in any proceeding identified about in Section II pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

None.